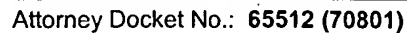


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TRANSMITTAL FORM

(to be used for all correspondence after initial filing)

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First Named Inventor

Tsutomu Nagaoka

Art Unit

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Examiner Name

Not Yet Assigned

Attorney Docket Number

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ENCLOSURES (Check all that apply)☐ Fee Transmittal Form☐ Fee Attached☐ Amendment/Reply☐ After Final☐ Affidavits/declaration(s)☐ Extension of Time Request☐ Express Abandonment Request☐ Information Disclosure Statement☐ Certified Copy of Priority Document(s)☐ Reply to Missing Parts/
Incomplete Application☐ Reply to Missing Parts under
37 CFR 1.52 or 1.53☐ Drawing(s)☐ Licensing-related Papers☐ Petition☐ Petition to Convert to a
Provisional Application☐ Power of Attorney, Revocation
Change of Correspondence Address☐ Terminal Disclaimer☐ Request for Refund☐ CD, Number of CD(s) _____☐ Landscape Table on CD☐ After Allowance Communication
to TC☐ Appeal Communication to Board of
Appeals and Interferences☐ Appeal Communication to TC
(Appeal Notice, Brief, Reply Brief)☐ Proprietary Information☐ Status Letter☒ Other Enclosure(s) (please
Identify below):Copy of English language
translation of International
Preliminary Report on Patentability
(Chapter 1)
Return Receipt Postcard

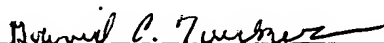
Remarks

SIGNATURE OF APPLICANT, ATTORNEY, OR AGENT

Firm Name

EDWARDS ANGELL PALMER & DODGE LLP

Signature



Printed name

David A. Tucker

Date

September 8, 2006

Reg. No.

27,840

PATENT COOPERATION TREATY

PCT

INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY (Chapter I of the Patent Cooperation Treaty)

(PCT Rule 44bis)

Applicant's or agent's file reference OF4491PC	FOR FURTHER ACTION	See item 4 below
International application No. PCT/JP2004/006583	International filing date (<i>day/month/year</i>) 10 May 2004 (10.05.2004)	Priority date (<i>day/month/year</i>) 07 November 2003 (07.11.2003)
International Patent Classification (8th edition unless older edition indicated) See relevant information in Form PCT/ISA/237		
Applicant OSAKA PREFECTURE		

1. This international preliminary report on patentability (Chapter I) is issued by the International Bureau on behalf of the International Searching Authority under Rule 44 *bis*.1(a).

2. This REPORT consists of a total of 4 sheets, including this cover sheet.

In the attached sheets, any reference to the written opinion of the International Searching Authority should be read as a reference to the international preliminary report on patentability (Chapter I) instead.

3. This report contains indications relating to the following items:

- | | | |
|-------------------------------------|--------------|---|
| <input checked="" type="checkbox"/> | Box No. I | Basis of the report |
| <input type="checkbox"/> | Box No. II | Priority |
| <input type="checkbox"/> | Box No. III | Non-establishment of opinion with regard to novelty, inventive step and industrial applicability |
| <input type="checkbox"/> | Box No. IV | Lack of unity of invention |
| <input checked="" type="checkbox"/> | Box No. V | Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement |
| <input type="checkbox"/> | Box No. VI | Certain documents cited |
| <input type="checkbox"/> | Box No. VII | Certain defects in the international application |
| <input type="checkbox"/> | Box No. VIII | Certain observations on the international application |

4. The International Bureau will communicate this report to designated Offices in accordance with Rules 44bis.3(c) and 93bis.1 but not, except where the applicant makes an express request under Article 23(2), before the expiration of 30 months from the priority date (Rule 44bis .2).

The International Bureau of WIPO 34, chemin des Colombettes 1211 Geneva 20, Switzerland	Date of issuance of this report 27 July 2006 (27.07.2006)
Facsimile No. +41 22 338 82 70	Authorized officer <div style="text-align: center; font-weight: bold;">Masashi Honda</div> e-mail: pt08@wipo.int

PATENT COOPERATION TREATY

TRANSLATION

From the
INTERNATIONAL SEARCHING AUTHORITY

PCT

WRITTEN OPINION OF THE
INTERNATIONAL SEARCHING AUTHORITY

(PCT Rule 43bis.1)

To:

Date of mailing
(day/month/year)

Applicant's or agent's file reference

OF4491PC

FOR FURTHER ACTION

See paragraph 2 below

International application No.

PCT/JP2004/006583

International filing date (day/month/year)

10.05.2004

Priority date (day/month/year)

07.11.2003

International Patent Classification (IPC) or both national classification and IPC

Applicant

OSAKA PREFECTURE

1. This opinion contains indications relating to the following items:

- ☒ Box No. I Basis of the opinion
- ☐ Box No. II Priority
- ☐ Box No. III Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
- ☐ Box No. IV Lack of unity of invention
- ☒ Box No. V Reasoned statement under Rule 43bis.1(a)(i) with regard to novelty, inventive step or industrial applicability: citations and explanations supporting such statement
- ☐ Box No. VI Certain documents cited
- ☐ Box No. VII Certain defects in the international application
- ☐ Box No. VIII Certain observations on the international application

2. **FURTHER ACTION**

If a demand for international preliminary examination is made, this opinion will be considered to be a written opinion of the International Preliminary Examining Authority ("IPEA") except that this does not apply where the applicant chooses an Authority other than this one to be the IPEA and the chosen IPEA has notified the International Bureau under Rule 66.1bis(b) that written opinions of this International Searching Authority will not be so considered.

If this opinion is, as provided above, considered to be a written opinion of the IPEA, the applicant is invited to submit to the IPEA a written reply together, where appropriate, with amendments, before the expiration of 3 months from the date of mailing of Form PCT/ISA/220 or before the expiration of 22 months from the priority date, whichever expires later.

For further options, see Form PCT/ISA/220.

3. For further details, see notes to Form PCT/ISA/220.

Name and mailing address of the ISA/JP

Authorized officer

Facsimile No.

Telephone No.

WRITTEN OPINION OF THE
INTERNATIONAL SEARCHING AUTHORITY

International application No.

PCT/JP2004/006583

Box No. 1 Basis of this opinion

1. With regard to the language, this opinion has been established on the basis of the international application in the language in which it was filed, unless otherwise indicated under this item.
☐ This opinion has been established on the basis of a translation from the original language into the following language _____, which is the language of a translation furnished for the purposes of international search (under Rule 12.3 and 23.1(b)).
2. With regard to any nucleotide and/or amino acid sequence disclosed in the international application and necessary to the claimed invention, this opinion has been established on the basis of:
 - a. type of material
☐ a sequence listing
☐ table(s) related to the sequence listing
 - b. format of material
☐ in written format
☐ in computer readable form
 - c. time of filing/furnishing
☐ contained in the international application as filed.
☐ filed together with the international application in computer readable form.
☐ furnished subsequently to this Authority for the purposes of search.
3. ☐ In addition, in the case that more than one version or copy of a sequence listing and/or table(s) relating thereto has been filed or furnished, the required statements that the information in the subsequent or additional copies is identical to that in the application as filed or does not go beyond the application as filed, as appropriate, were furnished.
4. Additional comments:

WRITTEN OPINION OF THE
INTERNATIONAL SEARCHING AUTHORITY

International application No.

PCT/JP2004/006583

Box No. V Reasoned statement under Rule 43bis.1(a)(i) with regard to novelty, inventive step or industrial applicability;
citations and explanations supporting such statement

1. Statement

Novelty (N)	Claims	2, 9-21, 23	YES
	Claims	1, 3-8, 22, 24	NO
Inventive step (IS)	Claims	9, 21, 23	YES
	Claims	1-8, 10-20, 22, 24	NO
Industrial applicability (IA)	Claims	1-24	YES
	Claims		NO

2. Citations and explanations:

Document 1: Yojiro YAMAMOTO et al., "Nano Gap o Motsu Kin Nano Ryushimaku o Mochiita Atarashii Denki Teikogata DNA Sensor no Teian", The Japan Society for Analytical Chemistry, Dai 52 Nenkai Koen Yoshishu, 09 September 2003, p. 92
Document 2: Shiho TOKONAMI et al., "Kin Nano Ryushimaku o Mochiita DNA Sensor no Kaihatsu", Society of Nano Science and Technology Soritsu Taikai Koen Yokoshu, 29 May 2003, page 205
Document 3: Shiho TOKONAMI et al., "Kin Nano Ryushimaku o Mochiita DNA Sensor no Kaihatsu", 10 May 2003, p. 205
Document 4: JP 5-322817 A (HOUSTON ADVANCED RESEARCH CENTER) December 7, 1993 & WO 93/22567 A
Document 5: JP 2003-185662 A (MASSACHUSETTS INSTITUTE OF TECHNOLOGY) July 3, 2003 & WO 93/22678A

Claims 1, 3-8, 22 and 24

Documents 1-3 cited in the ISR describe the inventions mentioned in claims 1, 3-8, 22 and 24 so that they do not appear to possess novelty and to involve an inventive step. (Since the legal systems differ depending on the country, appeals relating to exceptions to lack of novelty of invention at the international stage are not taken into consideration).

Claims 2 and 10-20

The inventions described in claims 2 and 10-20 do not appear to involve an inventive step. Forming the sensor on the recessed portion disposed on the substrate is merely a design detail which could have been easily been carried out if necessary by a person skilled in the art.

Claims 9 and 21

None of the documents cited in the ISR describe activating both terminals of DNA or an antibody using a SH group or an NH₂ group, and this is not obvious to a person skilled in the art.

Claim 23

None of the documents cited in the ISR describe adjusting beforehand the measuring sample which contains a sample and a probe, and this is not obvious to a person skilled in the art.